

**What is claimed is:**

1. A transmission apparatus of a mobile communication terminal comprises:

a modem for outputting an intermediate frequency (IF) signal, and an auto gain control(AGC) signal;

a gain controller for adjusting a gain of the IF signal according to the AGC signal;

a power controlling circuit for adjusting the AGC signal according to temperature change of the terminal, and applying the adjusted AGC signal to the gain controller; and

a transmission signal processing block for converting the IF signal whose gain is adjusted, into a radio frequency (RF) signal, amplifying and bandwidth filtering the converted RF signal, then amplifying power of the RF signal as much as the RF signal can reach a receiving side, and emitting the amplified RF signal.

2. The apparatus of claim 1, wherein the transmission signal processing block comprises:

a mixer for converting the signal whose gain is adjusted, into a RF signal;

a drive amplifier for amplifying the RF signal;

a filter for bandwidth filtering the amplified signal; and

a power amplifier for sufficiently amplifying power of the signal as much as the filtered signal can be transmitted to a receiving side through the air.

3. The apparatus of claim 1, wherein the power controlling circuit is positioned between the modem and the gain controller.

4. The apparatus of claim 1, wherein the power controlling circuit comprises:

a thermistor whose one side is connected with the modem, and whose  
5 other side is connected with the gain controller; and

a resistor whose one side is earthed, and whose other side is connected with the thermistor in parallel.

10 5. The apparatus of claim 1, wherein the power controlling circuit comprises:

a first resistor whose one side is connected with the modem;

a second resistor whose one side is connected with the first resistor, and whose other side is connected with the gain controller; and

15 a thermistor whose one side is earthed, and whose other side is connected with the first and second resistors in parallel.

6. The apparatus of claim 1, wherein the power controlling circuit comprises:

20 an AGC adjuster for adjusting an AGC signal of the modem according to temperature change of the terminal, and applying the adjusted AGC signal to the gain controller; and

a signal amplifier for amplifying the AGC signal applied to the gain controller at a voltage level as much as the modem can recognize, and transmitting the amplified AGC signal to the modem.

7. The apparatus of claim 6, wherein the AGC adjuster comprises:  
a thermistor whose one side is connected with the modem, and whose  
other side is connected with the gain controller; and  
a resistor whose one side is earthed, and whose other side is connected  
5 with the thermistor in parallel.

8. The apparatus of claim 6, wherein the AGC adjuster comprises:  
a first resistor whose one side is connected with the modem;  
a second resistor whose one side is connected with the first resistor, and  
10 whose other side is connected with the gain controller; and  
a thermistor whose one side is earthed, and whose other side is  
connected with the first and second resistors in parallel.

9. The apparatus of claim 6, wherein the signal amplifier is  
15 implemented using an operational amplifier.